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Response dated December 19, 2003

Reply to Final OA of November 5, 2003

Regarding rejection (a), Applicants' comments below refer to the remarks presented at pages 3-4 of the Action mailed May 23, 2002 (Paper Number 5). With respect to rejection (b), Applicants' comments below refer to the remarks presented at Section Nos. 3-7, pages 3-7, of the present final Action (Paper Number 17, mailed November 5, 2003).

Applicants' Response

Applicants respectfully traverse each of rejections (a) and (b).

With respect to rejection (a), the combined disclosures of Newberry and Schleinz do not disclose the recited "(b) a *coating layer coated* on a surface of said extruded film layer (a)" wherein "said *coating* layer (b) is a porous ink-receiving layer that has an open-cell structure with interconnecting voids."

Newberry contains two disclosures concerning coatings. At column 6, lines 53-63, Newberry discloses coating the composite sheets. At column 13, lines 5-26, Newberry discloses coating an image layer on an imaging element. Neither disclosure discloses the presently recited "(b) a coating layer coated on a surface of said extruded film layer (a)" wherein "said coating layer (b) is a porous ink-receiving layer that has an open-cell structure with interconnecting voids."

Referring to the remarks presented at pages 3-4 of the Action mailed May 23, 2002 (Paper Number 5), the Examiner at the time made the following assertion:

Newberry further shows an image layer (coating layer) comprising gelatin and polyvinyl alcohol which is coated on the imaging element (column 13, lines 5-26). Newberry shows that calcium carbonate particles, silica, and alumina are added to the layers of the imaging element (column 5, line 30 to column 6, line 20).

First, as mentioned above, the disclosure at column 13, lines 5-26, does not disclose the claimed porous ink-receiving layer that has an open-cell structure with interconnecting voids.

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Second, the disclosure at column 5, line 30 to column 6, line 20, is not a teaching to modify the image layer (coating layer) coated on the imaging element disclosed at column 13, lines 5-26. The disclosure at column 5, line 30 to column 6, line 20, is a teaching to modify the so-called composite sheet, including its core matrix and/or skins.

Applicants present the following brief summary of Newberry's "detailed description," from column 2 through column 13, for the Examiner's convenience:

- column 2, line 65, through column 6, line 52 - Newberry's "composite sheet" is disclosed in general, including Newberry's "top-side" sheet;
- column 6, lines 53-63 - Newberry discloses coating the composite sheets, as discussed above;
- column 6, line 64, through column 9, line 15 - Newberry's "bottom" sheet;
- column 9, lines 16-25 - Newberry's support;
- column 9, line 26, through column 13, line 4 - Newberry's adhesive resins/bonding layer; and
- column 13, lines 5-26 - Newberry discloses coating an image layer on the imaging element, as already discussed.

Newberry's coated imaging layer, and its relation to Newberry's imaging element and composite sheets, is also conveniently summarized at column 12, lines 20-33, and the table therein.

Thus, Newberry does not disclose the presently recited "(b) a coating layer coated on a surface of said extruded film layer (a)" wherein "said coating layer (b) is a porous ink-receiving layer that has an open-cell structure with interconnecting voids."

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Schleinz does not cure this deficiency of Newberry. Schleinz is relied upon for the teaching of the "fibers" element in the presently claimed extruded film layer (a). In this regard, Applicants refer to the remarks at page 4, first full paragraph, of the Action mailed May 23, 2002 (Paper Number 5).

Accordingly, Applicants respectfully request the withdrawal of rejection (a) above.

Turning to rejection (b), it differs from rejection (a) insofar as it relies on Laney as an additional secondary reference. Based on the Examiner's comments in the paragraph bridging pages 5 and 6 of the present final Action (Paper Number 17), Applicants understand that the Examiner is relying on Laney for the motivation to modify Newberry and arrive at the presently claimed porous ink-receptive coating layer (b) having an open-cell structure with interconnecting voids.

Applicants respectfully disagree and request the withdrawal of rejection (b).

At column 13, lines 19-25, Laney discloses the following:

The support as heretofore described can be *coated* on the top layer with an ink-receiving layer commonly used which contains mordanting agents to hold the ink dyes close to the top surface of the support, said ink-receiving layer also containing UV absorbers and the like.

Laney's disclosure at column 13, lines 19-25, is its only disclosure pertaining to the presently claimed coating layer (b) coated on a surface of extruded layer (a). Laney's disclosure at column 13, lines 19-25, is the same as, and redundant in view of, Newberry's disclosures at column 6, lines 53-63, and column 13, lines 5-26. Both Laney and Newberry mention an ink-receiving coating layer, but neither Laney or Newberry discloses the presently recited "(b) a coating layer coated on a surface of said extruded film layer (a)" wherein "said coating layer (b) is a *porous ink-receiving layer that has an open-cell structure with interconnecting voids.*"

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Laney's disclosures of impermeable bottom layers, permeable upper layers, and open-celled voiding (column 3, lines 10-14) all relate to its imaging support. In other words, Laney's disclosures of impermeable bottom layers, permeable upper layers, and open-celled voiding correspond exactly with Newberry's top and bottom sheets of its composite sheet. In the context of the present invention, Laney's disclosures of impermeable bottom layers, permeable upper layers, and open-celled voiding may correspond with extruded layer (a), core layer (c) and skin layer (d), as recited in present Claims 6 and 7, but Laney does not disclose the presently recited "(b) a coating layer coated on a surface of said extruded film layer (a)" wherein "said coating layer (b) is *a porous ink-receiving layer that has an open-cell structure with interconnecting voids.*"

Accordingly, Applicants respectfully request the withdrawal of rejection (b) above.

II. Section No. 2: Rejection Under 35 U.S.C. § 103

Claims 1-5 and 9 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Publication 2001/0016248 to Alderfer, *et al.* ("Alderfer") in view of Laney.

Applicants' comments below refer to the remarks at Section No. 2, pages 2-3, and also pages 5-7, of the present final Action (Paper Number 17).

Applicants' Response

Initially, Applicants would like to point out that they are grateful for the Examiner's clarification at the paragraph bridging pages 5 and 6 of the present final Action (Paper Number 17) that Laney, rather than Alderfer, is being relied upon for the teaching of the presently claimed porous ink-receptive coating layer (b) having an open-cell structure with interconnecting voids. Applicants misunderstood the sentence at Section No. 3, page 2 of the Action mailed May 21, 2003 (Paper Number 15), stating that "[t]he sheet has a coating on it and comprises calcium

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carbonate joined to at least one side of the microporous material at [003], [0022], [0024], and [0051]."

Applicants understand the indication at the paragraph bridging pages 5 and 6 of the present final Action (Paper Number 17) to mean that the Examiner agrees that Alderfer does not disclose or suggest the claimed porous ink-receptive coating layer (b) having an open-cell structure with interconnecting voids.

For the reasons presented at Section I of this Response, in connection with rejection (b) of that section, Applicants respectfully submit that Laney does not provide the motivation or suggestion to modify Alderfer's disclosure and arrive at the claimed invention.

Laney's disclosure at column 13, lines 19-25, is its only disclosure pertaining to the presently claimed coating layer (b) coated on a surface of extruded layer (a). Thus, Laney mentions an ink-receiving coating layer, but Laney does not disclose the presently recited "(b) a coating layer coated on a surface of said extruded film layer (a)" wherein "said coating layer (b) is *a porous ink-receiving layer that has an open-cell structure with interconnecting voids.*"

Laney's disclosures of impermeable bottom layers, permeable upper layers, and open-celled voiding (column 3, lines 10-14) all relate to its imaging support. In the context of the present invention, Laney's disclosures of impermeable bottom layers, permeable upper layers, and open-celled voiding may correspond with extruded layer (a), core layer (c) and skin layer (d), as recited in present Claims 6 and 7, but Laney does not disclose the presently recited "(b) a coating layer coated on a surface of said extruded film layer (a)" wherein "said coating layer (b) is *a porous ink-receiving layer that has an open-cell structure with interconnecting voids.*"

Accordingly, Applicants respectfully request the withdrawal of this §103 rejection of Claims 1-5 and 9.

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III. Objective Evidence of Patentability

At the last paragraph on page 6 of the present final Action (Paper Number 17), the Examiner states the following:

Applicant further argues that Newberry, Schleinz, and Laney provide unexpected results. However, *whether unexpected or not, the same materials and structures are provided by the prior art, thereby teaching the claimed invention.*

Applicants respectfully request reconsideration of the above position and reconsideration of the objective evidence of patentability presented in the present specification.

Objective evidence of patentability must always when present be considered en route to a determination of obviousness. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1538 (Fed. Cir. 1983).

In the present case, the Examiner dismisses Applicants' evidence by stating that whether unexpected or not, the same materials and structures are provided by the prior art. The fact that the Examiner believes that her proposed combination of Newberry and Schleinz, or Newberry, Schleinz and Laney, or Alderfer and Laney, teaches the same materials and structures as the present invention cannot be the basis for ignoring the objective evidence of patentability. Indeed, if the Examiner did not believe that her proposed combination taught each and every element of the claimed invention, she could not reasonably assert that a *prima facie* case of obviousness had been established in the first place. The fact remains that each of the present rejections are obviousness rejections, and it is well-settled that an alleged *prima facie* case of obviousness may be rebutted by a showing of the unexpected results achieved by the claimed invention.

Accordingly, Applicants respectfully submit that, in addition to the reasons presented at Sections I and II of this Response, the claimed invention is patentable over the prior art because

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the present specification contains objective evidence of patentability rebutting any alleged case of obviousness.

The claimed invention is directed to a film possessing the superior combination of an extruded film layer (a) and coating layer (b) both being porous and having an open-cell structure with interconnecting voids.

As evidenced by Control 3 in the Table at page 18 of the specification, if an open-cell porous HDPE film is printed on without an ink-receiving layer, the dry times are good but the image density is poor because the inks penetrate too deeply into the porous film. On the other hand, if a non-porous ink-receiving layer is coated on an open-cell porous HDPE film, the image densities are good, but the dry times are poor (Applicants refer to Controls 1 and 2 in the Table at page 18).

It is only possible to achieve the superior combination of good dry times and good image densities needed for photo-type images when a porous coating layer (b) that has an open-cell structure with interconnecting voids is coated on a porous extruded film layer (a) that has an open-cell structure with interconnecting voids (Applicants refer to Elements 1 and 2 in the Table at page 18). The superior combination of drying time and cyan density achieved by the present films is completely unexpected from the prior art.

It is noted that Applicants may compare the claimed invention with prior art that is more closely related to the invention than the prior art relied upon by the Examiner. In re Holladay, 199 USPQ 516 (CCPA 1978). In the present case, it is respectfully submitted that the comparative film structures in the specification are closer to the claimed invention (share more elements in common with the claimed invention) than any actual embodiment or working example disclosed in the cited art.

If the Examiner remains unconvinced by the showing in the specification, and especially the Table at page 18 and the Examples spanning pages 13-18 of the specification, Applicants respectfully request some detail as to why the showing is allegedly deficient.


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IV. Conclusion

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, she is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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Rick F. James
Registration No. 48,772

Post Office Address (to which correspondence is to be sent)
ExxonMobil Chemical Company
Law Technology
P.O. Box 2149
Baytown, Texas 77522-2149
Telephone No. (281) 834-2438
Facsimile No. (281) 834-2495